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Mary Jane DiPalma

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

H. Robert Horvitz et al.

Art Unit:

1633

Serial No.:

08/984,178

Examiner:

Filed:

December 3, 1997

Title:

CLONING SEQUENCING AND CHARACTERIZATION OF TWO

CELL DEATH GENES AND USES THEREFOR

Assistant Commissioner of Patents Washington, DC 20231

INFORMATION DISCLOSURE STATEMENT

Applicant submits the references listed on the attached form PTO 1449.

Submission of this statement is not a representation that a search has been made nor is information included in this statement an admission that the information is material to patentability.

Under 35 USC 120, this application relies on the earlier filing date of application serial number 08/287,669, filed on August 9, 1994. The following references were submitted to and/or cited by the Office in the prior application and, therefore, are not provided in this application:

U.S. Patent No. 5,196,333, Issued March 23, 1993, Chalfie et al.

U.S. Patent No. 4,855,319, Issued August 8, 1989, Mikolajczak et al.

WO 91/19007, PCT, December 12, 1991.

Ellis et al., "Genetic Control of Programmed Cell Death in the Nematode Celegans", Cell 44:817-829 (1986).

Yuan and Horvitz, "The Caenorhabditis elegans Genes ced-3 and ced-4 Act Cell Autonomoust to Cause Programmed Cell Death", Ann. Rev. Cell Biol. 134:33-41 (1991).

Ellis et al., "Mechanisms and Functions of Cell Death", Ann. Rev. Cell Biol. 7:663-698 (1991).

Yuan, "Genetic and Molecular Studies of ced-3 and ced-4, Two Genes that Control Programmed Cell Death in the Nematode C. elegans", Ph.D. thesis, Harvard University, Cambridge, MA (Cat. 1990 Widener Library).

Yuan and Horvitz, "The caenorhabditis elegans cell death gene ced-4 encodes a novel protein and is expressed during the period of extensive programmed cell death", Development 116:309-320 (1992).

Ellis et al., "Genes Required for the Engulfment of Cell Corpses During Programmed Cell Death in Caenorhabditis elegans", Genetics 192:79-97 (1991).

Ellis and Horvitz, "Two C. elegans genes control the programmed deaths of specific cells in the pharynz", Development 112:591-603 (1991).

Avery and Horvitz, "A Cell that Dies During Wild-Type C. elegans Development

can Function as a Neuron in a ced-3 Mutant", Cell 51:1071-1078 (1987).

Hengartner et al., "Caenorhabditis elegans Gene ced-9 Protects Cells from Programmed Cell Death", Nature 356:494-499 (1992).

Vaux et al., "Prevention of Programmed Cell Death in Caenorhabditis elegans by Human bcl-2", Science 258:1955-1957 (1992).

Vaux "Toward an Understanding of the molecular Mechanisms of Physiological Cell Death", Proc. Natl. Acad. Sci. USA 90:786-789 (1993).

Driscoll and Chalfie, "Developmental and Abnormal Cell Death in C. elegans", Trends in Neuroscience 15:15-19 (1992).

Driscoll, "Molecular Genetics of Cell Death in the Nematode Caenorhabditis elegans", J. of Neurobiology 23:1327-1351 (1992).

Freeman et al. "Cell Death Genes in Invertebrates and (maybe) Vertebrates", Current Opinion in Neurobiology 3:25-31 (1993).

Ledoux et al., "Isolation of Nematode Homologs of the C. elegans Cell Death Genes ced-3", Neurobiology of Aging 13:S47 (1992).

Yuan, "Genetic and Molecular Studies of ced 3 and ced 4 Two Genes that Control Programmed Cell Deaths with Nematode Celigri", Chapters 3 and 4 of Ph.D. Thesis (1990).

Siemeister et al., Plant Molecular Biology 14:825-822 (1990).

This statement is being filed before the receipt of a first Office action on the merits. Please apply any charges or credits to Deposit Account 03-2095.

Respectfully submitted,

Date:

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